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BIENNIAL REPORT
OF THE
STATE UNIVERSITY
OF KENTUCKY

TO HIS EXCELLENCY, THE GOVERNOR, AND
THE GENERAL ASSEMBLY OF THE
COMMONWEALTH OF
KENTUCKY



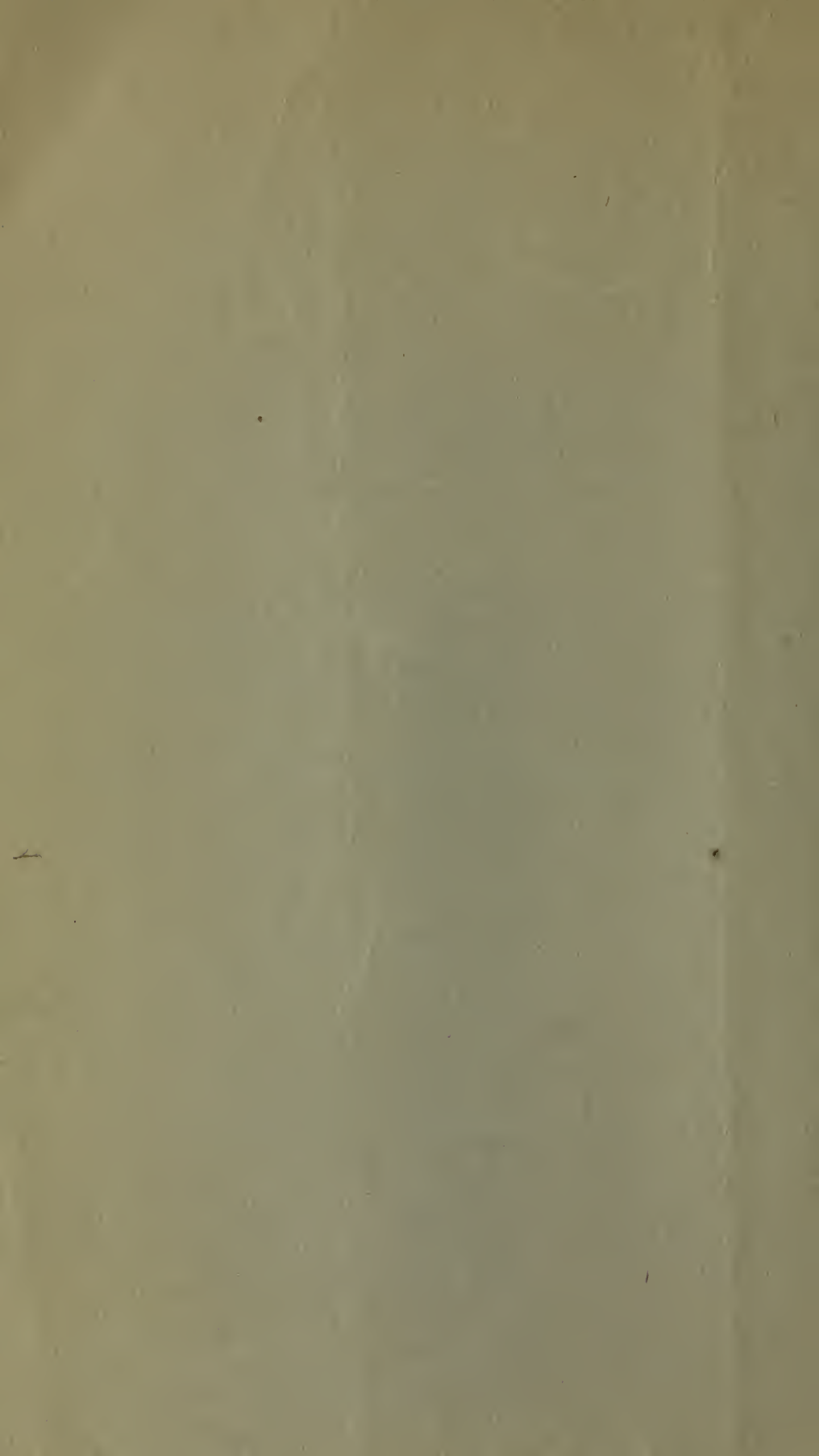
UNIVERSITY OF ILLINOIS

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PRESIDENT'S OFFICE

1911-1913

LEXINGTON, KY.
PRINTED AT STATE UNIVERSITY PRESS
1914



STATE UNIVERSITY OF KENTUCKY

BIENNIAL REPORT 1911-1913

To His Excellency,

JAMES B. MCCREARY,

Governor of Kentucky.

SIR:—I have the honor to submit the Bi-ennial Report of the State University for the two years ending June 30th, 1913.

The brief summary of the work of the Departments and Colleges and their collective effect on the present and future welfare of the State indicate epochal possibilities in the making of the State University the radiating center of culture, knowledge and efficiency throughout the State.

What the High School has been to the Public School the State University should be to the High School.

The Public School, High School and State University are maintained by the State taxes and the advantage of a University education should be as free to every graduate of the High School as the High School is free to the graduates of the Public School.

The University, being a Federal and State aided institution, and therefore not sectarian, has no conflict with colleges sectarian or otherwise.

The educational needs of Kentucky make room for all, and the University administration and Faculty are ready to join hands in any cooperative movement that will help to place Kentucky on an educational plane that will appeal to both our pride and self-respect, and make it a matter of boast in line with some of our other State virtues.

To accomplish this requires some central force continuous in influence from year to year, establishing and maintaining standards of proficiency, and co-laboring and cooperating with every school and college in the State. The University being strictly a State institution should be the clearing house for all educational forces in the State and therefore the radiating center of culture, knowledge and efficiency.

In order that we may proceed wisely and intelligently in the work of University expansion it was necessary to change some of our methods of accounting because the "ways" would not be forthcoming without the "means." I commend to your attention the financial statement of the University included in this report. It is simple, lucid and brief. It will stand all the analysis desired and emphasizes the relative cost of the State University of Kentucky as compared with other State universities. In this connection your special attention is directed to the following comparisons :

University.	Annual Income.	No. of Students.	
Wisconsin -----	\$2,000,000	4,500	
Nebraska -----	850,000	3,500	
South Carolina -----	115,000	426	
Illinois -----	2,225,000	4,850	
Texas -----	540,000	2,100	
West Virginia -----	210,000	715	
Missouri -----	1,000,000	2,700	
Indiana -----	336,500	2,000	
Iowa -----	830,000	2,100	
Alabama -----	135,000	750	
Arkansas -----	275,000	1,200	
North Carolina -----	263,500	900	
Mississippi -----	104,000	450	
Ohio -----	1,100,000	3,750	
Michigan -----	1,750,000	5,800	
California -----	1,675,000	4,750	
Virginia -----	295,000	800	
Minnesota -----	2,150,000	7,000	
Purdue -----	375,000	2,000	
Oklahoma -----	175,000	800	
Kansas -----	610,000	2,500	
Miami -----	175,000	850	
	\$17,188,000	54,441	av. \$310
Kentucky -----	\$200,000	1,250	av. \$160

Here we have a list of 22 representative Universities with a student enrollment of approximately 55,000 and a total income of over Seventeen Million Dollars, or an average per student of about \$310.00.

The poverty of the Kentucky State University compared with the average of these 22 Southern, Western and Central State Universities is emphasized when the income of this University for its 1250 students is only \$200,000, while the average for the 22 Universities for the same number of students is \$390,000. In other words our income to operate the University requiring the same standards of admission and for graduation is only 55% of the cost per student of the other 22 State Universities.

Short as our income is relatively, it is a matter of great satisfaction that we now know positively our financial standing with our Budget system governing all expenses, evidenced by requisitions, invoices and vouchers properly certified and audited.

On a parity with development of the Accounting Department has been the development of the Registrar's Office, with its complete record of Students, grades, etc.

The evolution of these two departments during the last two years will show their special value in the years to come, because both departments are statistical, and reliable statistics are invaluable, while unreliable statistics are worse than worthless.

The Registrar's record of students gives the following tabulations:

COLLEGES	1908-09	1909-10	1910-11	1911-12	1912-13
Academy	188	155	125	181	49
Arts and Sciences	160	152	204	270	318
Agriculture	48	66	101	198	286
Mechanical and Electrical Engineering	165	153	171	219	231
School of Mines	35	48	54	61	59
Civil and Rural Engineering	100	92	85	102	97
Law Schools	28	58	63	88	100
Summer School not including University students attending	38			49	90
Special students	10			6	17
	772	724	803	1175	1247
Less Academy and Summer School students	226	155	125	230	139
Net number of Actual University students					
	546	569	678	945	1108
Male	450	480	564	748	862
Female	96	89	114	197	246

We thus see that the number of students in the University proper has more than doubled in the last five years not taking into consideration the Academy, which has been dispensed with.

Is it not reasonable to expect with the development of the County High Schools and the privileges guaranteed to graduates of the same that we can expect the student body to double in the next five or six years? Will not the campaigns for better and more practical education, which are now sweeping over the country, inspire and stimulate the necessity for University education?

If so the fact must not be lost sight of that the "means" are indispensable to the "ways."

Of the 102 universities in the country their average per capita cost per student is \$255.00, while Kentucky spends only \$160.00. Even at those colleges in the United States and Canada that spend only \$10,000 to \$50,000 per annum in salaries, their student per capita cost is \$187.00, and their teaching is largely academic, while our teaching, though partly academic, is largely technical, since fully two-thirds of our students attend the Engineering and Agricultural Schools.

The student cost at a school of technology is fully double that of student cost in an academic college.

RATIO OF TEACHERS TO STUDENTS.—(Given by the Carnegie Foundation.)

California	One teacher to 8.5 students
Wisconsin	One teacher to 12. students
Columbia	One teacher to 7.3 students
Harvard	One teacher to 7. students
Yale	One teacher to 9. students

Pennsylvania	One teacher to 9.8 students
Leland Stanford	One teacher to 8.5 students
Michigan	One teacher to 15. students
Illinois	One teacher to 8.7 students

Now in the Kentucky State University we have today approximately 1,300 students and only 70 professors, instructors, etc., or an average of one teacher to 18.5 students.

For full and detailed information on the various courses of instruction, schedules of study, etc., you are respectfully referred to the University Catalog, a copy of which accompanies this report.

It will therefore only be necessary to emphasize some salient features of the various departments of the University showing recent development and the efforts to keep the University as abreast of the times as our "means" will permit.

Mechanical and Electrical Engineering College.

The value of the work done in any college can be largely measured by the demand for the services of its graduates. In this particular sense the graduates of this department, find it more difficult to select from the positions offered than to find a place when they graduate.

This year there were so many places for the graduates that for some little time individuals were wavering between opportunities.

The graduates in other years have made such splendid records that firms have come to the conclusion that the Kentucky trained mechanical or electrical engineer is a very desirable element in our industrial organization.

Although the equipment and facilities for carrying on this instruction are not comparable with those of other technical schools, yet the excellent work of our graduates is such that they have given the State University a very enviable reputation throughout the country.

When the means are forthcoming the equipment of this Department will need many additions and renewals to maintain anything like modern engineering shops.

In the meantime the ingenuity of the Dean and his staff is being taxed to the utmost to maintain the equipment in such working condition as will insure continued efficiency.

Civil and Rural Engineering.

The Good Roads movement in the State is calling for more engineers and although the graduates of this school have been in good demand for several years, yet the greater opportunities at home should make this Department more popular, since only 11,000 miles of turnpike roads in the State are in any sense improved out of the total of nearly 60,000 miles of public roads, which indicates not only the immediate need of rural highway engineers, but the possibilities of employment because of the growing demand for good roads. There is much work ahead if we are to keep pace with our sister States, for whereas ten years ago we held fourth place we have now fallen into the tenth place. We can recover our place only through the wise and

scientific use of public funds for roads and bridges. The day of the well trained engineer is here, and we can furnish him to help the State and County avoid many errors of the past.

The average number of students enrolled for each year since 1908 has been approximately 100, of which number not more than 25 graduate in any year, hardly enough to take care of the vacancies in the County Road Engineering departments, apart from the demand of other engineering departments of railroads, contractors, etc.

As a further evidence of the cooperative spirit of the University with the needs of the times we are now ready to install a complete Road Laboratory, which, with other facilities of the Civil and Rural Engineering College, insures an efficiency in preparation that will help to continue our reputation of having the largest percentage of graduates entering into the active work of engineering and with the least loss of time between graduation and occupation.

School of Mines.

The mineral wealth of Kentucky in coals and clays, in particular, places the State in the front rank of all States.

Yet Pennsylvania, with less coal area, produces as much coal in eight months in any one year as Kentucky has produced in the last eighty years.

West Virginia, with about the same coal area, produces three times as much coal as Kentucky in any one year.

This relation, however, will not last long, because Kentucky went from the 7th to the 5th in rank of coal production in 1912. This is just a foretaste of our industrial possibilities, which indicate a doubling of production by 1920. In other words, the 360 mines in the State will soon be 400 to 500 mines according to the ratio of recent developments.

This is only in the way of prelude to show the importance of the work of the School of Mines which is training the future engineers, superintendents and managers of the mines of the State, as well as providing means where needed to help the ambitious and progressive miner who aspires to something other than ordinary mine labor, by the establishment of a short course of eight weeks in the spring of each year to enable the miner to prepare for Mine Foreman, etc., as the law now requires that all mines employing fifteen or more men must be in charge of a certificated mine foreman.

Two hundred practical miners have already taken this short course and 95 per cent. hold certificates.

A reference to the Catalogue of this College will show that the course of study at the School of Mines is of such breadth that a graduate does not necessarily have to find his work at a mine, but may choose from the wide range of positions open to the trained engineer graduated in such a course.

But my belief is that the greatest benefit that this College can be to the State is not simply or chiefly in educating young men to become mining engineers or metallurgists. I believe that this school, in common with other State schools, can do its greatest work in educating miners. Most men connected with coal mining have reached the conclusion that the greatest agency for reducing accidents in the mines is education. Not only must we have

trained managers and trained engineers, but the necessity for greater efficiency, for a more intimate knowledge of principles, and for a wider range of information generally extends on down the line.

The expert miner and the common laborer alike must have a better education in matters pertaining to mining. This will enable him to understand the necessity for discipline—a difficult thing for an uneducated man to do. It has been repeatedly said that the best safeguard against accidents is discipline—obedience to a set of rules. But the natural tendency of a man seems to go against a set of rules unless he can see the reason behind it. Those who have their natural intelligence broadened by educational training can see the reason behind the rule, and ordinarily, when they see the reason therefor, they will follow the rule. I believe that, if placed in position to do so, the College can, through “extension work” among the mines, do a work of immense value, not only in educating men for positions of minor authority in the mines, but in educating the miner so that he will the more readily act in accordance with established rules and thus cooperate in limiting the number of accidents.

But to properly broaden its work so that the mine may be reached in an adequate way, the college must have greater facilities for extending its instructional work right to the mines in every locality. We must have sufficient means for the establishment of Miners’ Institutes and the employment of a sufficient number of instructors, provided with proper illustrative appliances, to carry on the “extension” work.

The purpose of the School of Extension is in part to extend the instructional work of the College of Mines and Metallurgy through the formation of local classes in the mining field, for men and youths employed at the mines, and through free lectures at mining centers and other appropriate places; also to disseminate information concerning the utilization of such of the mineral deposits of the State as require extended investigation in the laboratory for a full determination of their commercial applications.

For classes formed in the mining regions a Program of Studies is prepared by instructors in the College, examinations are held by representatives of the College, and certificates are awarded to such persons as satisfactorily complete the work laid out for them.

Arrangements have been made for carrying on the work in cooperation with the Mine Branches of the Y. M. C. A. and with several coal mining companies.

It is very desirable that an appropriation shall be obtained from the State, as has already been stated, for the adequate upbuilding of this work of extension.

The needs of the Department of Physics are exceedingly urgent, and are becoming more so each year with the increased enrollment of students. We have never had the equipment which our work requires. In some measure we have not been able even to undertake some work that our students should have been doing for years past. For a long time we lacked both adequate quarters and equipment. Three years ago we moved into new quarters. Our new quarters, however, are unfinished, and our equipment of apparatus is far short of what is needed. Our new building,

unfinished, cannot give proper returns in service; and our inadequate equipment cannot meet the demands for full and efficient training in Theoretical and Experimental Physics.

This matter is so important and so urgent it should be brought before the next Legislature in order to obtain the necessary relief, (\$15,000 could well be used).

Department of Mathematics and Astronomy.

Professor James G. White, who has for so many years guided the work of this department, died on July 18th last. It is not necessary for me to mention Professor White's great service to the University, his great personal worth and the high regard in which he was held by all who knew him. The members of his department have given expression to their feelings, by naming their mathematics club, the "James G. White Mathematics Club."

College of Law.

This school has been growing steadily ever since its organization, September 1st, 1908; and this year is by far the most prosperous and satisfactory one. Our number will, we think, before the year is out, reach fully one hundred and thirty students. In beginning our work for the first year we prescribed courses for two years leading to the degree LL. B., but after the first year we adopted the American Standard Course. We have been gradually increasing our law library until we now have more than five thousand volumes of standard law books, including the complete National Reporter System, all the reported English cases from 1650 down to the present time; L. R. A. Cyc. Encyclopedia of Law and Pleadings, duplicate sets of the Kentucky Reports, and a large collection of text books. We are making a special feature of our practice court work, requiring senior students to do work of this sort three periods each week during the whole of the senior year, which so fits the student that he is able to begin practice without encountering the usual embarrassment the beginner experiences in actual court work. It is the policy of this College of Law to insist that matriculates, who have not previously taken a University degree, take some University work in connection with their law work, which will better equip them to meet the increased demands on the profession. Many of our students are doing such work.

Chemical Department.

In order to make clear the relation of the School of Chemistry to the other departments of instruction and to the University as a whole, the fact that at the close of the term in December, 1913, report was made to the Registrar upon the work of 402 students assigned to chemistry, or that each week 1767 hours of work was done under the direct supervision of the teaching force, may prove of interest to the professional teacher, but the work involved in teaching this number of students will not be readily understood by the layman.

As a preliminary statement, I will say that for every hour spent in

teaching students who intend to follow chemistry as a profession, five and six-tenths hours are spent upon those who intend to engage in other lines of work. Therefore, it will be seen at a glance that the School of Chemistry is cooperating with the other departments of the University in training men and women for their life work.

The standard for entrance to the medical schools of the country is being steadily raised and in no subject as much as in chemistry. Our School of Chemistry is giving adequate instruction for entrance to the medical schools of the highest standing and in so doing is cooperating with the Department of Anatomy and Physiology.

It is conceded that no agricultural, mining or other industry can succeed today without the assistance of Chemistry, and therefore it is the policy of the School of Chemistry to give the students in the Schools of Agriculture, Mines and Metallurgy and Civil and Mechanical Engineering, such instruction as shall best fit them for their several professions. The man engaged in mining should not only know how to interpret analyses of the coal, iron, copper, lead and zinc ores, but as mine superintendent he should be skilled in the testing of the mine atmosphere for the presence of the deadly "fire damp," and should be able to make the analyses himself. In our chemical laboratory he is taught how to do all these things.

Our great corporations prescribe the analysis of all the supplies they purchase, and bills are not paid until the Chemist has shown the goods to conform to the specifications.

The graduates of the School of Chemistry are assisting in this work and contributing their mite toward the advancement of civilization.

College of Agriculture and Experiment Station.

The activities of this great department cover the whole agricultural interests of the Commonwealth of Kentucky. It is engaged, day by day, in enforcing the Pure Food Laws and the laws requiring proper sanitation of all the public places wherein the people's food is supplied. In this way the public health is greatly protected.

By means of the Extension Work of this Department, the great agricultural secrets of nature, discovered by learned scientists in their laboratories, are carried to the farmer, in his home, thereby enabling him properly to fertilize his soil and increase its productiveness.

There has been erected at the Experiment Station one of the most complete Hog Cholera Serum Plants in this country, where pure serum is sold to the farmers of Kentucky at actual cost and where a sufficient supply is kept on hand to meet the requirements of any epidemic which we may reasonably expect to occur among the swine of Kentucky. In addition to supplying our own citizens with all the serum that they need, at cost, the Station has been aiding three of our sister states in combatting hog cholera by supplying them, at a price exceeding cost production, all the serum which their necessities required. I feel confident that in the very near future, science will entirely eradicate hog cholera from this state, and in this way, save millions of dollars to the farmer. Our plant represents an investment

of some \$35,000, and the profits, thus far, justify its establishment even on ordinary business principles; that is, as a mere money-making establishment, without regard to the great good that has been done to the farmers by preserving their hogs from death.

There has also been established on the Agricultural Farm a complete Poultry Plant where it is proposed to investigate and find a cure for all diseases of fowls, and in addition, to furnish the farmers of the State, at cost, pure-bred stock and settings of eggs. In addition to this, we hope to be able to furnish invalids, such as tubercular patients, fresh eggs, thereby greatly aiding the physician in the cure of this dreadful disease.

The Director is carrying on experiments at the Farm and at the Station in the feeding of beef cattle with a view of furnishing the farmers with the very latest discovery on the subject of the efficient and economical feeding of said cattle, and I sincerely believe that great good will accrue to the State from these experiments.

The Extension Department is carrying into the fields of the farmer all that science teaches of agriculture and is maintaining and operating seven Experiment Farms, in various sections of the State, for the purpose of demonstrating to the citizens of these sections how best to cultivate and fertilize their land. These farms were put in operation for the first time during last year, and although they suffered from the severe drouth, before alluded to, they fully demonstrated their great value to the communities in which they are maintained.

In addition to the Extension Work done at the University through its own agents and employees, the United States is now cooperating with all the agricultural forces of the State in advancing the Agricultural Extension Work throughout the Commonwealth. At the head of the Board engaged in carrying forward the farm demonstration work is Dr. Bradford Knapp, of the United States Bureau of Agriculture, the Commissioners of Agriculture of Kentucky, the President of the State University, the Dean of the Agricultural College of the University, and the Presidents of the Eastern and Western Normal Schools of the State. This Board, operating in unison with the forces of the State Agricultural Department and the Extension Department of the University, is seeking to put an agricultural expert in each county of the State. During the past year, thirteen of these agents have been placed in the different counties, and in a short time there will be placed five more. During the time this work has been carried forward, the United States has spent \$20,000 in Kentucky, and in addition, we have raised \$13,300 from the various counties in which the agents have been placed.

The result of the work is most gratifying. Several of these agents have been working for nearly a year, and the influence they have had in the counties in which they operate is really remarkable. At the head of these various county agents there is at State University Dr. Fred Mutchler, whose headquarters are at the University, and who supervises the work of the county agents. The demand for county agents is so large that the Government funds have been exhausted and there are five counties on the waiting list with their money to add to that of the Government, in order to pay the

salary of the County Agent, whenever the Government is ready to supply the additional funds.

There is pending in Congress what is called the Smith-Lever Bill, which, if passed—and of that I am assured—will add many thousands of dollars annually to the fund of the Agricultural Extension work of the State. The Boys' and Girls' Clubs have done splendid work this year, considering the drouth, and the hard conditions in agriculture. Two reports have been received showing a yield of over 130 bushels of corn per acre, and a number of girls show a remarkable profit from small plots of tomatoes and other garden vegetables.

The State University is now fully launched on the great mission of being useful to the Commonwealth in a practical way. It is now following in the footsteps of the University of Wisconsin and the University of Illinois. Within the last decade, the University of Wisconsin nearly doubled the value of farm property in that State, and the University of Illinois is doing the same thing in that Commonwealth; and, in their gratitude, the people, through their representatives, give their Universities a much larger annual income than our whole University would sell for with our annual income added. Fifteen years ago, those Universities were as poorly supported as we are now; but fifteen years of faithful service to the great interest of the people has been rewarded by the munificent endowment which the Universities now enjoy. The fact that we are now busily engaged in teaching and extending scientific agriculture is the one reason the United States Government is cooperating with us in such splendid fashion, and the time is not far distant when it will be spending from fifty to one hundred thousand dollars annually in the State for the benefit of agriculture and education. Agriculture is the basis of nearly all real prosperity, and until the farmer is prosperous, we cannot expect him willingly to give much for merely cultural education; but if his business is made remunerative, he will open his purse liberally for the advancement of public education. Our course, then, in regard to the agricultural interests of the State, seems justified by every principle of practice and wisdom.

For fuller details of the work of the Experiment Station, I respectfully call your special attention to the Biennial Report of the Director, which is herewith handed to you in the form of a separate Bulletin.

Needs of the College of Agriculture as Outlined by the Dean.

The greatest need of the College of Agriculture, is that of a new building of sufficient size to accommodate the rapidly growing classes of this Department of the University. As pointed out in the regular tabulation, the number of students in the College of Agriculture has practically doubled every year for the past three years and the small building now devoted to agriculture is taxed to overflowing. It is safe to say that within a few years the number of students in Agriculture and Home Economics will number from a thousand to fifteen hundred. A new building that will properly and adequately accommodate the work of instruction in Agriculture and Home Economics is therefore the most urgent need of the State

University at the present time. Such a building should have at least four or five times the floor space of the present Agricultural building. There is an opportunity here for wise statesmanship or individual philanthropy such as occurs but seldom in a generation, and the people or person providing the means for such a building will find satisfaction in the thought that they have provided the means and the opportunity whereby future generations of young men and women may be trained in those branches most conducive to a useful, independent and self-supporting citizenship. Certainly there is no education that will mean more for the ultimate prosperity of the State than that which trains men and women to wrest their livelihood directly from the soil.

Secondly, we need more money for equipment. A good deal of the apparatus required in the several departments of the College of Agriculture is very expensive. In the departments of Botany and Entomology, for example, we have not a sufficient number of microscopes. The result is that the classes in these departments have to be divided into sections. Such an arrangement is unsatisfactory to the student and adds greatly to the burdens of the teacher. We could expend to advantage the sum of \$25,000 in new apparatus and equipment without adding a single superfluous or useless thing. In their life work our students must inevitably come into competition with those of the larger and wealthier universities. How can we expect them to hold their own in such competition unless they are familiar with all of the latest appliances and forms of apparatus used in scientific work?

A Barn For Agricultural Machinery.

One of the most noteworthy signs of our agricultural progress and development has been the invention and putting into practical effect of various mechanical appliances and machinery for lightening the burdens of the farmer and for enabling him to cultivate larger areas of land. In fact machinery has done for him what it has done for the rest of the civilized world. In any thorough and up-to-date course in agriculture, therefore, students must receive instruction in the use of farm machinery and training in those fundamental principles of mechanics which underlie the construction and operation of such machinery. It is as essential for the boy who expects to be a farmer to know how to operate and care for a gas engine as it is for him to know how to harness and feed a horse. In his daily work both serve precisely the same purpose. In the courses of instruction in agriculture offered at the State University, provision has been made for instruction in farm machinery. Through the generosity of dealers and manufacturers of agricultural machinery, a number of machines and appliances have been donated or permanently loaned to the department, and many more could be obtained for the asking had we adequate provision for their housing and care. A barn having a large floor space is needed for this purpose. In order to serve the best purpose, the roof of such a structure should be supported by steel trusses or girders, so as to obviate the necessity of supporting columns from the floor. In this way the entire floor space will be available for machinery. Such a barn will probably cost

ten thousand dollars and is entirely out of the question with our present resources.

Stock Judging Pavilion.

In my report on the work of the Experiment Station for the past two years, I have referred to the need of a stock judging pavilion, in which stock judging could be carried on comfortably during the winter months. As a general thing our winters are too severe to carry on this work in the open air, and yet it is during the winter term that a good deal of this work has to be done. Such a pavilion could probably be built for \$2,500.

Salaries.

The greater part of the funds available for the work of instruction in Agriculture and Home Economics is required for salaries of instructors. Many of these men and women are underpaid and are deserving of advancement from year to year. It is only in this way that we can hope to secure and retain the services of properly qualified persons to do the work of instruction in these departments. As matters now stand we have about reached the limit of our resources, so that we are continually confronted with the danger of losing the best talent that we have, and with the further disadvantage of having continually to introduce into the work of instruction new and untried men and women. For the past two years the annual appropriation of the College of Agriculture and Home Economics has amounted to only \$23,086.50, out of which have been paid the salaries of all employees and all expenses for maintenance and equipment. We could use to advantage twice this sum and yet do no more than our duty towards our students and those responsible for their training. The State of Kentucky spends large sums annually on the insane, the feeble-minded, the criminal and incapacitated. It should have a care for those who in the coming years will compose the finer fabric of its citizenship.

Dr. M. A. Scovell.

Dr. M. A. Scovell, Director of the Kentucky Experiment Station since its establishment in 1885, and head of the Agricultural Department of the State University, died August 15, 1912, in his fifty-eighth year.

Melville Amasa Scovell was born at Broadway, N. J., February 26, 1855. His collegiate work was done at the University of Illinois, then at the State Industrial University, where he graduated in 1875 with the degree of B. S., specializing in chemistry. He remained with the University for seven years after graduation, being successively instructor in chemistry, assistant professor, and later professor of agricultural chemistry. He received the degree of M. S. from the University in 1877, and of Ph. D. in 1908. While at the University he gave considerable study to the production of sugar from sorghum, and subsequently was engaged in active work in sugar factories in Kansas and Louisiana.

When the Kentucky Experiment Station was organized in 1885, he was elected its director, a position which he held continuously for 27 years.

Under his guidance and inspiration the Station developed from a very meager beginning to a large and well-equipped institution, with model laboratories and ample facilities for field work, and a revenue of approximately \$125,000, to which the Legislature had recently added a permanent annual appropriation of \$50,000.

This constructive effort called for the exercise of large business and administrative ability, and is perhaps to be regarded as Dr. Scovell's greatest work. But in addition he instituted and personally conducted experiments covering a wide range of subjects, including the culture and fertilizing of staple crops, the growing and curing of tobacco, and the handling of dairy cattle; and he planned for and directed the activities of the members of his staff along many important lines of experimental inquiry. As a leader of this group he was inspiring, sympathetic, and helpful, and contributed in large measure to the success of their work.

Dr. Scovell was an expert in dairy cattle, having given much study to the Jersey breed, and was pronounced "the best known and best liked judge of dairy cattle in America." He served as chairman of a committee nominated by the Association of American Agricultural Colleges and Experiment Stations to supervise the tests of dairy breeds at the World's Columbian Exposition in 1893, the most remarkable breed test ever conducted.

In a National way, he was prominently identified with the leading movements for agricultural advancement. For many years he held important offices in the Association of American Agricultural Colleges and Experiment Stations, being President in 1909, and was actively associated with the Association of Official Agricultural Chemists in their work in the development and improvement of methods of analysis. He was for several years a member of the Committee on Food Standards, which worked in cooperation with the Federal Department of Agriculture after the passage of the Food and Drugs Act of 1906.

The foundation which Dr. Scovell laid for experimental work in Kentucky and for the general improvement of Agriculture was broad and deep, and will remain a monument to his memory.

FINANCIAL REPORT OF THE STATE UNIVERSITY OF KENTUCKY July 1, 1911, to June 30, 1912

RECEIPTS

Federal—	Federal Fund, Morrill ('90) and Nelson ('07) Acts	\$ 42,750.00
“	Morrill Land Grant Act ('62). (Interest on Bonds)	8,644.50
“	General Educational Board	3,000.00
State	—One-half Cent Tax Act of 1880	47,500.10
“	Patterson Hall Act (1900) and Interest	2,013.25
“	Act of 1904)	
“	Act of 1908)	32,083.26
“	Act of 1912	37,500.00
Fees	—Tuition and Incidentals	2,328.00
“	Dormitories	2,043.00
“	Matriculation	285.00

Fees	Diplomas	645.00
Rents	Gymnasium	375.80
"	President's Residence	180.00
	Refund of Overpaid Salary (Dr. Patterson)	981.00
	Sundry Items	220.00
	Peabody Fund	40,000.00
	Bank Loans	52,000.00
	Students' Deposits	7,820.00
	Total	\$280,368.91
	Total Disbursements July 1, 1911, to June 30, 1912	275,594.48
	Balance Cash in Bank	4,774.43
	Checks on Hand not to be Used	1,279.04
	Balance on Hand June 30, 1912	6,053.47
	Difference in Bank Balance	2.98
	Net Balance on Hand	6,050.49

EXPENDITURES
1911-1912

1.	Executive	\$ 9,435.13
2.	Business Agent	4,201.13
3.	Registrar	4,105.11
4.	Dean of Women	1,945.12
5.	Chemistry	12,230.97
6.	Physics	5,023.57
7.	Geology	2,415.97
8.	Physiology	2,177.97
9.	Mathematics	7,513.50
10.	Education and Philosophy	12,780.50
11.	History and Political Economy	1,558.95
12.	Ancient Languages	3,865.78
13.	Modern Languages	3,974.25
14.	English	5,490.45
15.	Agriculture and Botany	13,789.73
16.	Zoology and Entomology	1,642.25
17.	Home Economics	2,011.62
18.	Mechanical and Electrical Engineering	26,683.77
19.	Mines and Metallurgy	5,580.45
20.	Civil and Rural Engineering	6,740.91
21.	Law	5,009.90
22.	Athletics and Physical Culture	8,043.61
23.	Military	1,282.61
24.	Summer School	1,558.50
25.	Library	2,579.70
26.	University General	16,084.95
27.	Grounds	2,626.69
28.	Patterson Hall	8,072.34
29.	Boys' Dormitories	13,082.44
30.	Y. M. C. A.	215.25
	Total Department Expenses	\$191,723.12
	Overdraft July 1, 1911	22,848.10
	Bills Payable	61,023.26
	Total Disbursements	\$275,594.48

ASSETS

June 30, 1912—Balance Due on One-half Cent State Tax-----	\$	957.60
“ “ State Appropriation-----		15,416.74
“ “ Rent-----		60.00
Cash on Hand-----		6,050.49
Total Assets-----	\$	22,484.83

LIABILITIES

June 30, 1912—Current Accounts-----	\$	17,826.71
Accrued Interest on Notes-----	338.16	\$ 18,164.87
Net Available Assets-----		\$ 4,319.96
June 30, 1912—Outstanding Notes-----	\$	52,698.17
Peabody Fund Trust-----		40,000.00
	\$	92,698.17
Less Available Assets-----		4,319.96

Total Liability-----\$ 88,378.21 assuming that the Peabody Gift of \$40,000.00 is a Trust Fund on which the interest alone is available.

FINANCIAL REPORT OF THE STATE UNIVERSITY OF KENTUCKY

July 1, 1912, to June 30, 1913

RECEIPTS

July 1st, 1913—Cash on hand-----	\$	6,050.49
Federal		
—Morrill (1890) and Nelson (1907) Acts-----		42,750.00
—Morrill Land Grant Act (1862.) (Int. on Bonds)-----		8,644.50
—General Educational Board-----		3,000.00
State		
—One-half Cent Tax Act of 1880-----		49,703.27
“ Patterson Hall Act of 1900-----		2,000.00
“ Acts 1904, 1908, 1912-----		100,416.74
Fees		
—Tuition and Incidentals-----		2,828.50
“ Dormitories-----		1,577.79
“ Matriculation, (late)-----		34.00
“ Diplomas-----		615.00
Rents		
—Gymnasium-----		466.34
“ President's Residence-----		240.00
—Sundry Items-----		851.75
Insurance		
—Fire and Tornado-----		3,211.00
—Bank Loans-----		80,000.00
—Athletic Games-----		3,125.65
—Accounts Receivable-----		2,999.59
		\$308,514.62
July 1st, 1913—Overdraft in Bank-----		36,583.91

Total Receipts-----	\$345,098.53
Total Disbursements-----	345,080.53

Students' Checks Cashied but Returned Un- paid-----	\$ 18.00
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STATE UNIVERSITY OF KENTUCKY

EXPENDITURES BY DEPARTMENTS

1912-1913

1.	Executive	\$ 7,423.09
2.	Business Agent	6,291.63
3.	Registrar	4,272.22
4.	Dean of Women	610.38
5.	Chemistry	10,847.86
6.	Physics	6,553.31
7.	Geology	2,741.16
8.	Physiology	2,485.58
9.	Mathematics	9,213.69
10.	Education and Philosophy	12,707.70
11.	History and Political Economy	2,113.30
12.	Ancient Languages	3,480.93
13.	Modern Languages	4,944.62
14.	English	7,757.08
15.	Agriculture and Botany	17,305.56
16.	Zoology and Entomology	2,598.00
17.	Home Economics	5,599.46
18.	Mechanical and Electrical Engineering	30,114.58
19.	Mines and Metallurgy	6,814.36
20.	Civil and Rural Engineering	6,714.89
21.	Law	6,210.10
22.	Physical Culture and Athletics	6,777.39
23.	Military	1,209.28
24.	Summer School	5,364.72
25.	Library	3,729.31
26.	University General	13,674.82
27.	Grounds	4,406.40
28.	Patterson Hall	3,471.13
29.	Boys' Dormitories	4,481.48
30.	Y. M. C. A.	1,109.99
31.	Athletic Association	4,917.59
	Total Department Expenses	205,941.61
	Bills Payable	125,648.17
	Refund to Experiment Station	2,500.00
	Paid on Last Year's Accounts	17,826.71
		\$351,916.49
	Total Cash Disbursements	\$345,080.53
	Less Checks Issued but not Used	705.12
		\$344,375.41
		\$ 7,541.08
	Current Accounts Unpaid	\$ 7,541.08

DISTRIBUTION OF DEPARTMENT EXPENSES

1912-1913

Salaries	—Professional	\$129,912.88
	Clerical	7,102.34
	Janitors and Labor	5,601.39
	Engineers and Fireman	2,414.97
		\$145,031.58
Fuel, Light and Water	—Coal	\$ 5,162.42
	Electric Light	3,083.38
	Gas	1,170.77
	Water	2,345.66
		\$ 11,762.23

Interest	848.20
Athletics	4,917.59
Equipment, Supplies, etc	43,382.01
	\$205,941.61

STATE UNIVERSITY OF KENTUCKY

July 1st, 1913

INVENTORY OF ASSETS

Real Estate—University Campus	\$100,000.00	
Patterson Hall	15,000.00	
Two City Lots	12,000.00	
		\$127,000.00
Buildings —Educational	\$36,000.00	
Gymnasium	40,000.00	
Administration	40,000.00	
Old Dormitory	30,000.00	
New Dormitory	12,000.00	
Old Chemistry	15,000.00	
New Chemistry	25,000.00	
Science Hall	35,000.00	
Library	25,000.00	
Mining	27,500.00	
Mechanical Hall	50,000.00	
Civil and Physics	50,000.00	
Agriculture	35,000.00	
Observatory	500.00	
Residences on Campus	5,000.00	
Patterson Hall	50,000.00	\$476,000.00
Department Equipment and Supplies.—Executive	\$ 333.85	
Business	629.50	
Registrar	341.70	
Dean of Women	105.30	
Chemistry	25,166.00	
Physics	8,618.40	
Geology	4,786.17	
Physiology	3,120.00	
Mathematics	1,530.24	
Education and Philosophy	1,177.75	
History and Political Economy	142.00	
Ancient Languages	424.00	
Modern Languages	739.60	
English	694.50	
Agriculture and Botany	8,694.80	
Entomology and Zoology	4,193.00	
Home Economics	2,169.68	
Mechanical and Electrical Engineering	39,196.82	
Mines and Metallurgy	8,446.49	
Civil and Rural Engineering	7,460.00	
Law	8,255.00	

STATE UNIVERSITY OF KENTUCKY

Physical Culture	2,786.26
Military (not including U. S. A. arms, etc.)	515.75
Library (10,000 vols.)	16,311.05
University General	420.45
Grounds	454.60
Patterson Hall	5,402.55
Boys' Dormitories	1,543.50
Y. M. C. A.	995.00
	<u>\$154,653.96</u>

ACCOUNTS RECEIVABLE

July 1st, 1913—One-half Cent Tax Balance due	\$ 2,981.36
Rent	60.00
Cash Advanced Account 1913 Summer School, etc.	2,232.28
Cash Advanced Account Salaries	135.30
Students' Fees and Damages	605.31
	<u>\$ 6,014.25</u>

LIABILITIES

Notes Payable	\$ 7,050.00
Accrued Interest	211.50
Accounts Payable	7,541.08
Overdraft	36,583.91
Peabody Trust Fund	40,000.00
	<u>\$91,386.49</u>
Less Accounts Receivable	6,014.25
Net Liabilities	<u>\$85,372.24</u>
Total Liability on March 1st, 1912, when Act of 1912 was on its passage.	<u>\$87,350.99</u>
Expenditures Kept Within Income from March 1st, 1912, to July 1st, 1913, by	<u>\$ 1,978.75</u>

SUMMARY OF INVENTORIES

University Real Estate	\$ 127,000.00
University Buildings	476,000.00
University Equipment, etc	154,653.96
Experiment Station Real Estate	122,850.00
Experiment Station Buildings	127,500.00
Experiment Station Equipment, etc.	65,000.00
Experimental Farm	8,500.00
Total Value of all Property	<u>\$1,081,503.96</u>

In concluding this report, I desire to make this short statement as a resume of what has already been said. The roster roll of the University has more than doubled in the last five years. The morale of the student body was never higher nor better within the history of the institution. The standards for entrance into the University are as high as are those of any other educational institution in the country. All of the colleges composing the University are doing splendid work—work that is equal to that of any similar institution in the South.

I have spoken more particularly of the Agricultural College because the farmer's interest has been neglected so long in this State that his needs are

much more apparent than those of any other interest. But our State is rich in other things than agriculture. We have more coal than Pennsylvania or West Virginia ; and in those mountain counties of which we have lightly spoken in the past as pauper counties, the time is not far distant when they will be the millionaire counties of the State. In the meantime, our College of mines is doing all that is possible for that great interest, and the people, in a few years, will feel its effect.

Then, too, our Law Department is second to none in the country. On this subject, I speak from my own knowledge and do not use the words of others. Law is a subject which lies close to my heart, and the Law School is one of my especial favorites. From what I know of it from my own observation I can truthfully say that it has no superiors in all the country. I do not mean that there are no Law Schools which have professors of greater reputation than the professors of our school, but I do say that in the thorough teaching of the law and procedure, the Law School of the State University is second to none.

Our College of Mechanical and Electrical Engineering stands in the very forefront of such institutions in this country. I do not mean that it is as large nor that it has anything like the equipment or the endowment of others; for, indeed, in this respect, it is sadly lacking. But the indomitable spirit and learning of its Dean and his staff have more than made up for the shortness of equipment; and the graduates that have been turned out in this department have taken the very front rank among the engineers of the country. The discipline and thoroughness of Professor Anderson's department is most excellent. Its young men are scattered all over the country. They have Alumni Clubs in New York, Philadelphia, Pittsburg and Chicago; and when, as it occasionally happens, I have the pleasure of attending the Annual Alumni Banquet of these clubs, I return to the College with a greater courage and inspiration and hope for the future. A great railroad man said to me that the boys of State University on his road were in a class by themselves; that he always expected from them more than the average fidelity and efficiency.

Reiterating what I have said heretofore, that all the Colleges of the University are doing splendid work along their respective lines, I submit this report to you as required by law.

Very respectfully,

HENRY S. BARKER,

President.





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